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Strategic Design of There App's Business Model: From Product to Multi-sided Platform

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Abstract

The following work project illustrates the strategic issues There App, a mobile application, faces regarding the opportunity to expand from its current state as a product to a multisided platform. Initially, a market analysis is performed to identify the ideal customer groups to be integrated in the platform. Strategic design issues are then discussed on how to best match its value proposition with the identified market opportunity. Suggestions on how the company should organize its resources and operational processes to best deliver on its value proposition complete the work.

Keywords: There App, multi-sided platform, strategic platform design, business model analysis, mobile live video streaming program, startup.

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1 Scope, Objectives and Methodology

The present research work is part of a three-piece work project in collaboration with There App,¹ an innovative mobile live video-streaming platform, in the Field Lab of Entrepreneurial Innovative Ventures. The scope of this work will be the analysis and discussion on the design of There App's business model: from its current state as a product to a multisided platform.

Portuguese startup There App developed a mobile app, with the same name, that enables users to view any place in the world live, through another user's smartphone. It does so by allowing them to directly interact with each other through a world map interface and receive or broadcast live video content using their smartphones. By relying on user-generated content, the platform can potentially generate value by catering solely to this customer group. Despite this fact, There App has the opportunity to incorporate additional customer groups with whom those users are already interacting through different mediums, and for whom the platform can both deliver increased value and reduce costs.

The overarching research question of this research work will hence be: How to design a sustainable multisided platform business model for There App?

The study further divides into the following sub-research questions: (i) What is the current market opportunity to be explored? (ii) How should There App design its multisided platform to best match its value proposition with that market opportunity? (iV) and 3) How should the company organize its resources and operational processes to best deliver on its value proposition?

The research strategy employs a mix of quantitative and qualitative methodologies, as well as a discussion on the main schools of thought regarding Internet technologies, strategic platform design and business model design and innovation. The answer to the

¹ Apart from my work on the general business model of There App, Eduardo Quinteiro Lopes (Nova Sbe Msc. Management student #) examines the company's macroeconomic context, industry structure and market attractiveness, and Miguel Farrancha (Msc. Management student #) analyses in-depth how There App customer groups' needs affect the design of the platform.

first sub-research question is derived by assessing the key trends in consumer mobile device and application usage, as well as those of markets identified as being ideal for There App's multisided platform strategy. Questionnaires and personal interviews complement this and help identify the underlying needs of There App's user base,² as well as those of other potential customer groups. The second sub-research question is addressed by discussing existing literature on the subject of strategy formulation and platform thinking and design. This discussion is crossed with conclusions drawn from the questionnaires and interviews conducted on the identified customer groups. Lastly, the methodology employed for the third sub-research question begins with a discussion on the main literature on business model design and innovation to map out There App's ideal business model. Financial projections of the proposed business model and final recommendations complete the work.

2 Company Overview

There App is a Portuguese startup founded in 2014 by three Nova SBE graduate students – Alexandre Prata, Eduardo Quinteiro and Miguel Farrancha - and an experienced designer – Helder Luis.³ The company had its origins while still at university, having then been chosen among 29 other startups to participate in the international startup acceleration program Lisbon Challenge.⁴

² A closed answer online questionnaire (See Figure 1 in the Appendix) was conducted covering multiple ages, geographies and educational backgrounds. From the 171 participants, there was an approximate 50 percent split between males and females, spanning from the ages of 15 to 61, with the majority of them (48 percent) belonging to the age bracket of 18 to 25. 22 nationalities were represented. Moreover, the majority of the chosen sample possessed a higher education, and 84 percent declared owning a smartphone. The main objectives of this survey were: to validate the assumptions and market needs behind There App's value proposition; and to gather information on smartphone and mobile app usage patterns, peoples' willingness to pay for mobile apps, and individuals' receptivity for mobile advertising and live events.

A total of 50 personal interviews were then conducted with an interviewee sample that closely matched the demographics of the online questionnaire. Here the goal was to complement the quantitative results with a qualitative assessment of the issues. Excerpts of the main findings are presented along this work in the form of quotes.

³ Nova School of Business and Economics is the leading business school in Portugal according to Eduniversal Ranking. (Eduniversal Ranking 2014).

⁴ Lisbon Challenge is an ambitious 3-month acceleration program aimed at eager international startups in information and communication technologies sectors and in prototype or product phase, looking for a truly innovative and empowering experience. The program is based in Lisbon, where the 30 chosen teams meet with 200 international mentors & investors as well as participate in workshops, pitch sessions and networking events, culminating in an international Investors Day and Roadshow to London, Boston, Silicon Valley and Tel Aviv (Lisbon Challenge 2014).

The original idea behind There App was to enable anyone to view any place in the world live, through another user's mobile device. The first version of the app, available for iOS on Apple's App Store since the beginning of October, enables that by allowing users to directly interact with each other through a world map interface and receive or broadcast live video content using their smartphones or tablets.

2.1 Mission and Vision

There App strives to provide everyone with a "window to the world". This vision rests on the belief that the way people share and access information nowadays is imperfect. The company's goal is therefore to give people a platform where they can provide and access video footage in real-time of any location around the world. With this in mind, There App aims to become the worldwide leading video-streaming mobile app, in its vertical of social information-sharing, by 2017.

3 Literature Review

Technology, and specifically the Internet, has long proved to be a disruptive force that transcends all areas of the economy and with it, shapes the foundations of our modern society. This is much due to its ability to empower companies and individuals alike to develop products and business models that better keep up with the ever more connected, agile and savvy customers. Solis (2014) refers to this evolution as "digital Darwinism." Porter (2001) further remarks that "(...) its greatest impact has been to enable the reconfiguration of existing industries that had been constrained by high costs for communicating, gathering information, or accomplishing transactions."

This disruption has materialized through the last decades in what Jamison (2012) describes as technology waves. The first wave – entitled Web 1.0. - came with the advent of web connectivity and industry pioneers such as Netscape, Yahoo! and Google. Its successor - Web 2.0. - introduced a social layer to the Internet, bringing together individuals and empowering them with new platforms of interaction where

content evolved to being continuously revised by all users in a collaborative nature (Kaplan 2010). The new era - Web 3.0. – brings with it a new form of freedom in the shape of mobile (thus being commonly coined as “Mobile”). It revolves around ubiquitous, real-time access to high quality information, as well as interconnectivity between the real and virtual worlds. Barnes (2002) points out that this decade will see a convergence between wireless communications and the Internet that provides enormous possibilities for value creation and appropriation.

There App aims to cash-in on such opportunity by developing a platform that attracts multiple customer groups and delivers them with a unique value proposition, and a complementary business model that is able to successfully capture value in return. However, before diving into how this platform should be designed, the existing literature on multisided platforms, two-sided networks and business model design needs to be introduced.

The concept of multi-sided platforms (MSPs) is not new, however, online platforms have been increasingly emerging as particularly interesting cases. One of the main reasons is that platforms such as Amazon or eBay (connecting buyers and sellers), or even Facebook (connecting users, advertisers and third-party content developers) are among the fastest growing businesses of the past decade with huge impact on their respective industries and, consequently, in the life of millions of people around the world. These multisided platforms consist of products and services that bring together groups of users in two-sided networks,⁵ providing the infrastructure and rules necessary to facilitate transactions (Eisenmann, Parker and Alstaying 2006). In MSPs, value is created primarily through direct interactions between and among the different customers or participant groups. These interactions can be seen as both one-sided (or direct) network effects – when they occur between users of the same group (e.g. Skype) – and two-sided (or indirect) network effects – when they occur between users of different

⁵ Literature on the subject commonly names these sides as customer groups, who should not be mistaken by customer segments (Hagiu 2013). Within one specific side of a multisided platform, i.e. a customer group, there can exist several customer segments (e.g. teenage users and adult users of There App).

groups (e.g. Facebook, Uber). In both situations, value on the platform increases according to the number of participants in those interactions (Hagiu 2013).

Porter (1985, 36) defines the value chain as the succession of the activities necessary to produce, market, deliver and support a product or service. It's based on the process view of organizations as systems that transform inputs into outputs. Amit and Zott (2001) argue that the generic activities proposed by Porter (1985, 36) raise many issues when applying the framework due to the nature of e-business firms. Contrary to traditional value chains, where value is created from left to right - from cost to revenue - with producers and consumers at opposite ends, in two-sided networks, a platform serves as an middle-man for two distinct groups of users, each with their own costs and revenues. The MSP thus can generate revenue and typically incurs costs when serving both groups (Eisenmann, Parker and Marshall 2006). Following the latter authors' proposal, for this work, I will suggest an adaptation of Porter's (1985, 36) value chain framework that better fits There App's multisided platform nature.

The literature on business model innovation and design in recent years has surfaced two main strategic management templates: the Business Model Canvas and its offspring, the Lean Canvas. The Business Model Canvas, originally proposed by Alexander Osterwalder in 2008, is a strategic management template that can be employed to develop new or characterize existing business models. It takes the form of a visual chart that depicts a firm's value proposition, customers, infrastructure and finances, distributed in nine interconnected blocks.⁶ This interconnectivity between blocks forces a systematic thinking of the business model. Moreover, in a single glance, one can have an overview of the entire business model. It is centered on value proposition and considers product-related factors on its left side and market-related factors on its right side (Osterwalder 2010).

⁶ The nine composing blocks of the Business Model Canvas are: value propositions; key activities; key resources; key partners; customer segments; customer relationships; channels; cost structure and; revenue streams.

The Lean Canvas, first proposed by Ash Maurya in 2009, is an adaptation of the Business Model Canvas based on the lean startup principles.⁷ It places a higher emphasis on defining broad customer problems and corresponding solutions, as opposed to the more specific and “validated” approach of the original Business Model Canvas.⁸ The Lean Canvas was developed as a tailored version for entrepreneurs, with the goal in mind of being as most actionable as possible by incorporating uncertainty and risk (Maurya 2009). Both models assist firms in aligning their resources and activities to best deliver their value proposition. However, Maurya (2012) believes the original Business Model Canvas fails to properly comprehend the underlying market problem from the get-go and thus the derived solution becomes also flawed. The author advocates removing key activities and customer relationships since the first one should be derived from the solution and the latter incorporated in the channels box. The author further suggests that key resources and partnerships are not so crucial nowadays for early-stage startups, due to lower capital requirements in the first case and common misuses of time and focus in the latter. The Lean Canvas incorporates instead dedicated blocks for problem, solution and key metrics definition, as well as the company’s unfair advantage (i.e. its competitive advantage). By doing this, the author believes a company can be more focused on a few crucial actions and metrics.

Even though the Lean Canvas template is tailored for early-stage companies such as There App and the author presents some compelling arguments regarding its superiority over the original Business Model Canvas, in this thesis I will proceed to design There App’s business model using the framework proposed by Osterwalder (2010). I chose to do so given that the Business Model Canvas allows for a more in-depth analysis of all the components of the business. It also gives higher emphasis to the weight of

⁷ Lean startup is a business and product development methodology, originally proposed in 2011 by Eric Ries. The lean startup rests on the idea that the combination of business-hypothesis-driven experimentation and iterative product releases can reduce development cycles and market risk. The author further defends that entrepreneurs can experience what he defines as “validated learning” by building products or services that best meet the needs of early customers and thus reduce the risk of failure or the need for large initial capital investments (Ries 2011).

⁸ The nine composing blocks of the Lean Canvas are: unique value proposition; problem; solution; key metrics; customer segments; unfair advantage; channels; cost structure and; revenue streams.

partnerships that specifically in There App's case can be one of its major growth channels (e.g. student unions) and a huge determinant of its success. Reinforcing this decision is the fact that I will cover many of the Lean Canvas blocks in other frameworks of this research work, such as "Problems" (e.g. market analysis), "Solutions" (e.g. platform design) and "Key Metrics" (e.g. strategic objectives and KPIs).

4 Environmental Assessment

There App's target markets will ultimately be defined by what parties it brings on board to its ecosystem. Given the company's opportunity to integrate additional constituents into its platform, and that its concept revolves around sharing live footage, the advertising and event markets naturally come to mind as possible first targets. However, the hypothesis of whether users would be interested in viewing live events on their smartphones or be willing to accept advertisement needed to be tested. Starting with There App's most important members – its users - an analysis is performed on their specific needs, followed by those of the validated complementary customer groups. The relationships between all relevant players and There App are then drawn out in an industry mapping. In order to fully answer the first sub-research question, Seifert, Leleux and Tucci's (2008) framework for technology ventures is then applied to address each of the target markets' size (measured in dollar amount or in number of potential customers), market growth and industry trends. Competition will not be addressed, since it will be fully covered in another research work of this three-piece work project.

4.1 Target Market and Market Needs

4.1.1 Users

The original assumption around There App was that people would want to view any place in the world live, through another users' mobile devices. The information collected from the questionnaires in Figure 1 of the Appendix supports that belief.

When presented with the question if they would use a mobile app for specific situations, two main market needs surfaced:

People want to know, on the spot, how is the ambience at a place before going there.

Likewise, individuals want to share with multiple friends what they are experiencing, as it happens.

Additionally, two secondary needs can be said to have potential of being explored:

People are curious about what's going on halfway around the world (i.e. "Digital Traveling").

People want to be able to watch remote, live events.

The interviews conducted also highlighted these market needs. Most individuals referred that nowadays whenever they are curious about a certain location or event, they are limited to searching for posts on the Internet and social networks or calling their friends to get that information. One college student describes how he and his friends decide whether a certain party is worth attending, "Whenever my friends and I are divided about going to a party or not, we usually call up some friends to find out if they're also going or just search for it on Facebook." (interviewee, 21, male). The interviews also helped to better identify the desire to share experiences with multiple friends. One interviewee explains how she often wishes she could show her remote friends what she is doing in an instant way, "Whenever I'm having a great time like enjoying a nice view, or seeing something crazy happening, I would love to be able to have my friends experiencing it as well." (interviewee, 29, female).

Users' smartphone usage patterns regarding their day-to-day situations support all the market needs identified above, since more than three quarters of interviewees stated they use their smartphones while on-the-go, or at restaurants, cafes, bars or nightclubs. This represents more opportunities for users to resort to the app when faced with one of the scenarios described above.

College students have been identified as the potential early-adopters and power users of the app. In the interviews conducted, college students – both local and exchange students - were the subset of interviewees that showed greater enthusiasm for There App’s value proposition, and those who saw themselves using it with the most frequency and variety of use cases. They also appeared to be the most tech-savvy regarding the mobile app ecosystem.

4.1.2 Advertisers and Advertising agencies

There App has the opportunity to use its platform to provide a service to a third-party such as advertisers or advertising agencies, who can leverage the platform’s user base as an audience for their advertisements. The survey’s findings regarding people’s low willingness to pay for apps along side their tolerance for relevant in-app ads reinforces this opportunity.⁹ This is exponentiated by There App’s need to find an appropriate revenue model.

Advertisers, as any other company, are interested in raising individuals’ awareness towards their brand and products or services. Advertising agencies come in as “middle-men”, helping create, plane and handle marketing efforts (usually in the form of advertising) for its clients. Both share the main objective of increasing the return on investment (ROI) of their marketing efforts. For this, they are constantly seeking new channels that allow them to better understand their customers and deliver more relevant marketing messages to them. There App’s mobile platform can grow to become such a channel. As Jamison (2012) points out “monetizing in Mobile is about getting even more real and concrete in the value delivered to customers. (...) Mobile brings advertisers and users closer to being able to close a transaction. It’s real-world

⁹ In the survey conducted, the vast majority of respondents stated that they have never paid for a mobile app and that they would not be willing to pay for an app that allowed for the possibilities mentioned in question 13 of the questionnaire (See Appendix 5 and 6). When faced with an alternative, more than half of respondents showed receptivity to seeing advertisement in video format, the most engaging and focus-demanding of all advertisement formats (See Appendix 7). Moreover, almost half of the subjects (45 percent) showed receptivity to in-app personalized advertisement that relies on their profile information, as opposed to 38 percent who are against it and 17 percent who are indifferent.

commerce.” The survey conducted for this research confirms just that. Figure 9 in the Appendix shows that respondents notice ads much more frequently while using apps, than in other use cases involving a smartphone. This reinforces the opportunity to harness that user attention and leverage it in the form of what Maurya (2012) describes as a derivative currency to sell on a secondary market to advertisers and ad agencies, who have a need for it.

4.1.3 Event managers

The survey and personal interviews performed also shed a spotlight on a third possible market: live events.¹⁰ Event managers are always looking for opportunities to increase their audience or find ways to better understand and communicate with them.¹¹ A particular subset of event managers – college student unions – presents itself as an interesting first focus market. This is mainly because college students have been identified as the potential early-adopters and power users of the app. Supporting this decision is There App’s founders’ knowledge of the market and network of contacts.¹² All student unions share in common the mission to best serve their student bodies.¹³ For that reason, yearly budgets are formulated not so much to maximize profit, but to maximize impact on student well-being. Personal interviews with representatives of several of the main colleges’ student unions helped identify their key needs regarding the events they promote for their students. Practically all of the interviewees confirmed the desire to promote events that are relevant and engage the students at their college.

¹⁰ Close to half of the respondents (48 percent) stated that they would use a mobile app to watch a remote live event (See Figure 2 in the Appendix). Personal interviews with the target user base also favor the decision to bringing event managers on board to broadcast their events live on There App. Over half of interviewees stated that they would be interested in watching a remote live event through There App if it matched their personal interests. One subject explains how he often watches live events and would do so more often if it were instantly available on a mobile app “I usually watch live streams of football matches and live concerts of my favorite bands, and having the ability to do so on my phone would just make it that much easier.” (interviewee, 34, male).

¹¹ Event managers are the individuals or entities that design, plan and execute an event, taking on roles that include overseeing the financial, logistical, design and technical elements.

¹² Since its launch in October 2014, the company has been partnering up with several of the main colleges’ student unions in Portugal to help them promote their events through the app, getting in exchange, free advertising through their own marketing channels.

¹³ A student union is a student organization commonly present in colleges, universities, and high schools, whose main goal is to serve students’ best interests. It does so by performing an array of activities ranging from student support and representation, to social projects or event organizing.

Moreover, the great majority indicated that they are constantly looking for new ways to create value for their students and to better communicate with them.¹⁴ Another opportunity identified with the interviews was this customer group's need to increase their students' attendance and engagement levels with on-going events.¹⁵ In order to assess if this market had any potential of monetization, besides the organic growth of users it originates, student union representatives were asked about their willingness to pay for an event broadcasting solution like There App. Close to half of them declared they would be open to do so on a trial basis, given that the price fit their marketing and communication budgets, and that students truly manifested interest in watching their events through There App.¹⁶

4.2 Market analysis and Industry Trends

Mobile is the fastest growing technology wave the world has ever seen.¹⁷ At the forefront of this new wave of innovation are the widespread adoption of smartphones and the increasing availability of affordable mobile data plans,^{18 19} which together have led to a recent surge in mobile data traffic.²⁰ The combination of these industry trends has created prosperous grounds for companies and independent developers to introduce mobile applications (Apps) that create value for consumers in all kinds of verticals.²¹

¹⁴ One interviewed student union president remarked, "A lot of times we organize great activities for our students but many of them can't attend, and they end up not being able to know how great they were." (interviewee, 24, male).

¹⁵ One interviewee who is responsible for the recreational department of her student union noted, "We would love to have a way for all our students who don't attend, to see how our events are like. This would definitely help bring more people to that event or make them want to come to future ones." (interviewee, 22, female).

¹⁶ One subject pointed out "Every year we draw up our marketing budget according to what goals we want to achieve. If There App can help us communicate better with our students, we are happy to invest in it." (interviewee, 22, male).

¹⁷ Each new technology computing cycle typically generates around 10x the installed base of the previous cycle, with the fifth cycle - mobile internet - being expected to grow to over 10 billion devices (KPCB 2014).

¹⁸ Smartphones are a particular subset of mobile phones, characterized by having advanced computing capability and connectivity and being able to run an operating system (OS). This OS provides a platform for applications with a standardized interface, as well as connection to the Internet (Phone Scoop 2014). The most popular OS are Google's Android and Apple's iOS, which together represent 96.1% of the worldwide smartphone OS market (IDC 2014).

¹⁹ The number of mobile data subscriptions worldwide is increasing rapidly, and driving growth in data traffic along with a continuous increase in the average data volume per subscription (Akamai 2014).

²⁰ Global Mobile data traffic is expected to increase 11-fold between 2013 and 2018, with a compounded annual growth rate (CAGR) of 61 percent. This represents a growth speed three orders of magnitude greater than that of fixed Internet traffic (Cisco 2014).

²¹ Mobile applications are software programs, serving different purposes, designed to run on smartphones, and available to users through the OS app stores - Android Google Play, iOS App Store and Windows Phone Store (Mashable 2014).

New players in the market have the opportunity to develop solutions that follow a mobile-first strategy and thus deliver a user experience that better matches customer needs (Jamison 2012).

Another trend that is rising with mobile is the increasing ability to instantly access or share large amounts of data, which comes with the rapidly declining computing costs (KPCB 2014). Video content, in particular, has seen consistent year-on-year growth and is expected to represent the lion's share of Internet traffic in upcoming years.²² Users are increasingly turning to mobile devices for their video consumption,²³ a trend that greatly supports There App's value proposition. Demand for live events are a major driver of this growth, with live streaming of major sports events (e.g. the Fifa World Cup) becoming increasingly popular among users and their mobile devices (OOYALA 2014). Usage patterns on smartphones are of particular interest for There App. The greatest share of videos watched on these devices is content with duration of one to three minutes (e.g. watching previews and highlights). However, long-form video and live content (e.g. live events) is increasingly becoming popular, with the most frequent viewing times being ten to thirty minutes long (OOYALA 2014). This poses as an emerging opportunity for There App to tackle the live events market. The company has the opportunity test this market by starting with the student events niche, in its home country. As of 2010, there were 142 college student unions in Portugal (Juventude.gov.pt 2010). Collectively, they represent a potential total addressable market of 1 million Euros per year.²⁴ Further opportunities lay in the other 1000 officially registered youth associations (Juventude.gov.pt 2010), student unions of other countries, or in other verticals of event management (e.g. festivals).

²² Online video is expected to represent 86% of all consumer Internet traffic by 2016 (Cisco 2014). IDC (2014) defines online video as the distribution of video content to consumers via the Internet.

²³ During the third quarter of 2014, thirty percent of all online video consumption was done on mobile devices. It is further forecasted that fifty percent of all video consumption will occur on mobile devices by the third quarter of 2015 (Ooyala 2014).

²⁴ Value was derived from analyzing multiple student union budget reports. Data showed that student organizations allocate €7,000 to their yearly marketing and event budgets. Interviews conducted with several student union representatives support these assumptions.

Looking into the mobile Internet advertising market,²⁵ on the contrary, requires taking a global approach, due to this market's inherent nature. Global mobile advertising has been growing at an astonishing rate, having achieved a market size of 12.76 billion dollars in 2013, after a 37 percent increase. (KPCB 2014). By 2017 it's expected to nearly quadruple its size, with strong growth across all global regions (Lomas 2014). Video will show the highest growth, according to analysts' expectations. Even so, display ads are expected to maintain their leading position in revenue generation. Other mobile ads types that fit There App's platform nature (e.g. location-based ads) are also expected to see a breakthrough (Lomas 2014).²⁶

Video, in particular, is increasingly attracting advertising agencies. This can be explained by the fact that it is highly successful at communicating a brand's emotional benefits, by appealing to various human senses. The higher engagement leads advertisers to be willing to pay a premium for this ad format (Opera Media Works 2014).

4.3 Industry Mapping

Having identified the opportunity in the market, as well as the main players to be integrated in There App's platform, it is important to map out how these interact with each other and with other key players of the industry. **Figure 12** in the Appendix provides a preview of the overall ecosystem, with There App at its the center. Entities are color-coded according to their nature in the eyes of any given player. There App and its competitors are perceived as alternatives in each of their respective markets and as

²⁵ Internet advertising can be described as the IP-based delivery of any kind of paid-for marketing message (e.g. display ads, rich media ads and video ads) through any medium (e.g. web sites, mobile apps), on any device (e.g. personal computers, mobile devices) (IDC 2009). Mobile advertising can be seen as all forms of internet advertisement that leverage mobile devices' capabilities and allow advertisers to both collect data on personal, real-time and real world information on users, as well as deliver tailored ads to them (Dhar and Varshney 2011). By exploiting these capabilities, mobile advertising has the potential for becoming omnipresent and relevant, thus resulting in significant revenue for advertisers, applications developers and various other stakeholders present in the Mobile value chain (Dhar and Varshney 2011).

²⁶ Location-based services (LBS) can be defined as services that depend on and are enhanced by positional information of mobile devices, via Internet and wireless communications. LBS have great potential for the creation of various highly personalized and context-aware services for use at both an individual level, as well as in social networks (Dhar and Varshney 2011). Location-based ads can potentially benefit from such characteristics and allow advertisers to deliver more relevant and tailored marketing messages.

such are grouped together. Advertisers and advertising agencies follow the same logic for There App or its competitors, and so are also colored together. The same logic applies to event managers and other entities. Existing relationships between players is represented as solid lines. Dashed lines represent new relationships that There App can potentially create with its multisided platform. Customers are the key player in the environment, since they are the ones who drive demand. Mobile device owners that are able to download There App can be considered as the main customer since ultimately, they drive the success of the company. Event managers and advertisers face customers of their own, which can potentially acquired as users of the app. There App's main competitors are thus in the end users market. However, it faces additional competition in each the event management and advertising markets. These might not specifically take the shape of mobile apps, but instead should be seen as all existing alternatives to There App that customers in those markets pursue. As Maurya (2012) noted, "Your true competition is NOT who you think they are, but who your customers think they are." Suppliers (light grey color) represent all the entities that provide the infrastructure, services and tools necessary for There App to design and deliver its value proposition to its target customer groups. Mobile network providers (e.g. Vodafone²⁷) and mobile device manufacturers (Apple²⁸) provide the foundations for users to be able to enjoy software created by independent developers such as There App. Mobile software distribution platforms (e.g. App Store) serve as channels that allow those users to reached. Third party providers complement this ecosystem by providing services that might not be considered core There App's business model (e.g. web services such as cloud computing). Influencers complete this picture and represent any individuals or entities that can shape the existing structure of the industry or influence its members' actions within it. These range from government to media and other trendsetters (e.g.

²⁷ Vodafone Group plc is a British multinational telecommunications company.

²⁸ Apple Inc. is an American multinational consumer electronics, computer software and online services company.

celebrities), among others. Their impact is represented on the map not as solid lines, but as shock waves to the overall ecosystem.

5 Strategic design of There App's platform

Given There App's nature and company vision, combined with the market needs and opportunities identified in the first sub-research question, it is imperative that it develops a strategic plan to evolve past a sole product towards a value-creating platform. Gawer and Cusumano (2008) emphasize that companies should choose early on between a product or platform strategy, as this decision influences the company's product roadmap, technological evolution, design of the system, monetization model, and business relationships. There App's transition from product to platform will be more effective if it defines its end goal early on and then uses it as a guide to develop its entire business model. In order to best answer the second sub-research question – *How should There App design its multi-sided platform to best match its value proposition with that market opportunity?* – I will resort to the framework developed by Andrei Hagiu (2013) for designing multi-sided platform strategies. The author defends that any company looking to follow this path will face the following challenges: (i) Choosing the number of customer groups to integrate the platform; (ii) Designing the platform's features and functionalities; (iii) Defining the non-price governance rules that delineate how constituents interact on the platform; and (iv) Defining the platform's pricing structure. Discussion on how There App can implement this framework for its own platform design is addressed in the following subchapters.

5.1.1 Number of sides on the platform

As mentioned previously, There App has identified advertisers and event managers as the ideal customer groups to integrate its platform. These were chosen mainly since: (i) they currently already interact with There App's user base in other settings and the

platform can increase the value or decrease the cost of those interactions; and (ii) their ability to generate strong indirect network effects within the platform.

Advertisers, for instance, will benefit from decreased search costs in the form of an audience for their advertising campaigns.²⁹ Likewise, for event managers, There App will reduce two-sided asymmetric information between users looking for live events and event managers searching for spectators who might then be persuaded to visit the locale and convert to clients.³⁰ There App will also be able to deliver value to both customer groups in the form of reduced shared costs - Users will have a more efficient way to see a live event and event managers to broadcast it.³¹ Contrary to this, in the case of advertisers, indirect network effects only flow one way: the value of the platform for advertisers increases with the size of the audience, but more advertisers can actually decrease the value for There App users.³² This will ultimately influence the design of the platform, since a balance between revenue generation (e.g. advertising) and user experience will need to be maintained. By catering to these three sides, There App will have the upside of generating robust network effects without risking spreading its resources too thin. Additional sides could add too much complexity to the system or lead conflicts of interest between its members.

5.1.2 Platform's features and functionalities

There App should design its platform features and functionalities around its constituents' needs, with the main objectives being: (i) assuring a positive user experience; (ii) reducing search and shared costs and maximizing network effects

²⁹ Search costs are costs that occur between members of a platform prior to their interaction, with the intent being matching the right "trading partners" to each other (Hagiu 2013).

³⁰ The data collected on the surveys indicated that 48 percent of respondents would watch live events on a mobile app (See **Figure 2** in Appendix). Additionally, from the interviews conducted with several individuals, one out of four subjects indicated that they would feel more inclined to attend certain events if they first saw live footage of their ambience. One interviewee explained how watching an excerpt of a live event led to her decision to convert into an attendee of that event. "It's often happened to me deciding on going to a certain conference because I saw a really interesting speaker speaking live on TV." (interviewee, 40, female).

³¹ Shared costs come into play after trading parties in a platform have identified each other and thus represent those costs that occur during the transaction itself (Hagiu 2013).

³² The fact that 37 percent of respondents of the questionnaire replied that they would not be willing to see advertisement instead of paying for a mobile app supports this idea that there is an inverse relationship to advertisement and users' perception of a positive experience.

between its members; (iii) and assuring the company has the ability to monetize. Specific product features and functionalities will not be addressed as they are explored in more detail in other research projects of this Work Project. We will instead take a bird's-eye-view approach.

As with most business decisions, the golden rule entails analyzing the tradeoff between the development and implementation costs of those features and the value they bring to the various members of the platform. There App can be reformed to include event managers, by displaying them alongside regular users on the map or dedicating them a special section of the app for them to list their events. Advertisers can also be given the ability to promote their product offerings through display and video banner ads on advertising slots incorporated on the app.³³ These ads can be customized based on the user's profile and preferences according to their own specifications or obtained through their social profiles (e.g. Login with Facebook account).

The interests of all sides of the platform need to be carefully balanced and aligned with the company's long-term goals and vision. Take event managers: If the company chooses to adopt a long tail strategy³⁴ and empower event organizers to promote and manage their own events (e.g. allowing them to create premium accounts) it might benefit from rapid growing listings of events for its end users, but will inevitably loose control over the quality and relevance of its platform. On the contrary, if it decides to manage itself the events (e.g. employing a dedicated event integration team), it will be able to assure a higher quality and better direct its marketing and sales efforts, but this will require the organization to develop B2B expertise and might lead it to face a chicken-and-egg problem.

Likewise, advertisers' push for more numerous, blatant and tailored advertisements can lead to higher revenues for the company. However, this needs to be counterbalanced

³³ Banners ads are a form of advertisement that are delivered by an ad server and integrated into either a webpage or mobile app. These can be inserted into spaces on websites or mobile apps that are called advertising slots.

³⁴ Long tail markets relate to the large number of niche products or services in the tail of the demand curve, which can now be efficiently served thanks to technology, as opposed to the few mainstream products and markets characteristic of traditional markets (Anderson 2014).

with users' demands for privacy and a friendly user experience.³⁵ The underlying conflicts of interest require There App to make sacrifices in certain areas, and forfeit certain short-term gains. Given its potential to generate strong network effects and economies of scale, the company should use as a rule of thumb, to keep its eyes on the horizon and focus on the customer group that is crucial for There App's long-term success – its users.

5.1.3 Governance rules

Whereas the platform's features and functionalities determine the capabilities of its constituents, the governance rules help regulate the interactions between them. There App faces two important questions here: (1) Within the chosen customer groups, which individuals should be permitted to join; and (2) what should the various members be allowed to do. It all comes down to a strategic tradeoff between quality and quantity, driven by stricter or looser standards. Regarding the advertisement present on the platform, the company can choose to work with a myriad of advertisement agencies and integrate all kinds of different banner ads – possibly achieving a higher turnover - or choose to work with selected brands and ad agencies which will deliver fewer and more tailored advertisements – possibly with lower turnover. The research conducted suggests There App should strive to select more relevant ads for its platform (e.g. matching them with profile information collected from Facebook login).³⁶ In respect to the quality and relevance of events, these can be managed by the platform by maintaining a tighter control over which entities are able to promote them. The identified opportunity with student unions, combined with feedback collected from the interviews conducted, suggests that the safest path to test this market is for There App

³⁵ **Figure 8** in the Appendix perfectly exemplifies this apparent tradeoff. The sample of surveyed individuals stood divided regarding the receptivity for personalized ads, in detriment of their privacy.

³⁶ Close to half of the surveyed individuals mentioned they would welcome in-app ads that are more tailored to their personal preferences (See **Figure 8** in the Appendix). Interviews with a different sample base further supported that data. One of the interviewees highlighted his preference of personalized over generic ads, "I don't mind seeing ads in general. In fact, if they're about things that interest me I'll even ended up clicking on them. Generic ads about stuff I don't like is what annoys me." (interviewee, 27, male).

to self-manage what events it allows on board of its platform.³⁷ By working closely with students unions, it will be able to better understand the market dynamics, while at the same time assuring that all events on the platform remain relevant to its users. This comes at the expense of increased operational costs (e.g. dedicated business development teams). Given There App's objective of achieving large scale in terms of its user base, the best way to assure both quality and relevance of interactions between its users is to outsource certification and enforcement of quality to them. They can achieve this with the user-based rating systems (e.g. peer-rating at end of connection) that are already in place.

Regarding how each side is able to interact with each other – The current “pull for content” nature of the platform should be maintained and applied to the new customer groups. It is mandatory that users remain able to interact freely with all sides, since these are the lifeblood of the platform and the basis for its success. Therefore, event managers should be able to list their events but not force them onto users (e.g. through push notifications). The same applies to advertisers, whose ads should not get in the way of regular usage of There App's functionalities. Most consumers nowadays believe this type of mobile advertising is intrusive and abusive of their privacy (Dhar and Varshney 2011, 122). Banner ads are a good compromise between maintaining user privacy and generating revenue for the company, given that users “login” to them when using the app. However, as previously mentioned, this only holds true as long as displaying too many ads does not overwhelm overall user experience.

All these considerations rely on the fact that the strength of cross-side network effects on There App depend not only on the number of interactions between its constituents, but also on their quality.

³⁷ When asked about their willingness to manage their own events' listings on There App, over half of the interviewed student union representatives stated they would be willing to do so, but only if the process was fully automatized. Since at this point in time, some hardware installation (e.g. video cameras) need to be installed and connected to There App's platform, most interviewees mentioned they would value having a dedicated There App team to help with the setup process.

5.1.4 Pricing structures and revenue model

With three customer groups - users, advertisers and event managers - There App can potentially generate multiple revenue sources from each of them. The correct pricing structure, however, will be influenced by each constituent's characteristics. The first crucial characteristic is price sensitivity: Users are particularly price-sensitive when it comes to apps.³⁸ Advertisers and event managers seek to promote their products or services and thus are more inclined to pay for that opportunity.³⁹ Complementary to price is quality: Nowadays users are extremely sensitive to this measure,⁴⁰ which puts pressure on There App to subsidize them and instead use price as a measure to regulate advertisers' and event managers' offers. Likewise, if we take a broad-view, these two customer groups stand to benefit more from accessing There App's user base than the other way around. This suggests value should be captured on their side. If, in combination with this, users do not have a direct alternative to There App for watching certain live events, it empowers the company to charge event managers for transmitting them on this exclusive channel. Another important criteria to take into account is the effect of price on one-sided and cross-sided network effects: If There App charges any of its costumer groups, it will inherently reduce the number of participants and consequently limit the amount of cross-sided network effects. It can however use price to purposely reduce same side network effects as a way to attract and please certain key players (e.g. event managers) who seek to avoid direct competition.⁴¹ The cost of serving each customer group should also be taken into account. As a software company, There App is able to take substantial advantage of economies of scale. While initially

³⁸ As was concluded when the first sub-research question of this work was addressed.

³⁹ As was concluded when the first sub-research question of this work was addressed.

⁴⁰ The interviews conducted highlighted users' high expectations regarding quality and their low tolerance for poor products or services, including apps, advertisements and live events. Three out of four interviewees mentioned that they would not be willing to use There App for its main use case it failed to deliver on its value proposition. Moreover, they noted that the same applied to using the app to watch live events.

⁴¹ In the case of student unions, this strategy does not seem to prove effective, given that from the interviews conducted with their representatives the vast majority remarked not minding competition of other student unions' events, since each had their own "guaranteed" audience to cater to. However, in the case There App expands to other verticals of the event management market, it might prove successful.

there are high developments costs associated with producing the software, the marginal cost of adding new users is close to zero. On the contrary, as discussed before, adding event managers entails incurring in certain implementation costs (e.g. dedicated manpower to incorporate and regulate events on the system), and therefore poses as an additional reason to subsidize users and charge this customer group.

5.1.5 Main obstacles to the success of There App as a MSP

One of the main issues companies face when trying to implement a multi-sided platform is the chicken-and-egg problem: the struggle to simultaneously get both consumers and providers onboard given that one side will not perceive value in the platform if the other isn't present. There App is currently tackling that issue by focusing first on delivering the most value to its users through its app. In order to get around the fact that it does not yet incorporate event managers on its platform, the company is acquiring users by partnering up with several student unions of the main universities in Portugal. By offering to provide free coverage of their live events (e.g. parties; sports events) on its platform, There App receives, in exchange, free advertising through their marketing channels, thus taps into a pool of thousands of potential users and greatly reduces its customer acquisition costs⁴². With this strategy, it seeks to build a well-established single-sided product with strong same-side network effects between its users, which can then be leveraged to attract the additional revenue-generating sides - the advertisers and event managers. At the same time, it will perfect value offering for student unions, so that it can eventually start charging them for the service provided.

Other obstacles that There App might face down the road are: a possible "lemons market" failure due to deterioration of quality standards - where low-quality event managers ultimately drive down engagement levels and drive out good event managers;

⁴² This strategy takes inspiration from Graham's (2013) belief that startups are pairs of the idea behind the company itself, plus the unscalable things the organization needs to do initially to gain momentum. He further explains that "the right unscalable trick is to focus on a deliberately narrow market." Facebook's purposeful focus on building a social network for Harvard School, then gradually expanding it to Ivey League schools and eventually all universities and later the world, serves as a perfect example of this.

Conflicts of interest between different sides and detrimental competition between members of the same side and; Increasing complexity of the system – spreading organizational resources too thin and reducing its ability to innovate and deliver true value to any specific side.

6 Business Model Analysis

Having identified the best way to strategically design There App's multisided platform, we are now ready to apply the value chain framework - first introduced by Porter (1985, 36), taking into account the considerations proposed by Eisenmann, Parker and Marshall (2006) in their research work on multisided platforms – and the business model canvas framework proposed by Osterwalder (2010) in order to answer the third and final sub-research question: *How should the company organize its resources and operational processes to best deliver on its value proposition?*

6.1 Value Chain Analysis

There App's pursuit of a multisided platform strategy will mandate an evolution of its value chain in order to adapt to its constituents' needs and better deliver its unique value proposition. **Figure 13** in the appendix is a projection of There App's value chain for what can be considered the platform implementation phase.⁴³ Technology development⁴⁴ and marketing⁴⁵ expenditures are platform specific and will represent the majority of costs. As a software company, logistics will be composed mostly of server and human resource costs and will be almost entirely imputed to the users' flank of the value chain. Since these members will be subsidized, profit margin on their side will equate to zero. Revenues will instead be captured on the advertisers' side. However,

⁴³ January 2015 to December 2015. All values used for projections refer to the last month of such phase – December 2015 – and are derived from financial projections detailed in section 6.2.8. *Revenue Streams* of this work and exhibited in **Table 10** of the Appendix.

⁴⁴ Technology development costs consist mainly of human resource costs due to the nature of software design and development.

⁴⁵ Marketing costs comprise online advertisement (e.g. Facebook ads), offline marketing campaigns (e.g. partnerships with student unions) and costs with public relations agencies.

even though this side brings close to zero logistic costs, the platform's overall cost structure will be superior to the revenue generated on it, resulting in a negative profit margin. **Figure 14** in the Appendix provides an estimation of what the value chain might evolve to once it moves past the current trial period with selected student unions and starts bringing paying unions or other event managers on board. Once There App undergoes its platform expansion phase,⁴⁶ it will shift its value chain's focus from technology development towards marketing, business development and platform maintenance. Logistics costs will continue to be predominantly credited to end users, as will revenues to advertisers. Thanks to economies of scale, the company will also enjoy a positive profit margin. Moreover, the expansion towards event managers will unveil new paths towards monetization and profitability.

6.2 Business Model Canvas

A visualization of what the firm's overall projected business model, set around its value proposition, customers, infrastructure and finances can be seen in **Figure 15** of the Appendix. Elements are color-coded according to their focus customer group, to allow for easier interpretation. In the following sub-chapters I will proceed to describe each one of the nine constituent blocks in greater detail.

6.2.1 Value Proposition

There App's value proposition should be distinct for each of its three customer groups. Starting with its main customer group – end users – There App can potentially create value for them in a multitude of ways and settings, being only limited by their own imagination.⁴⁷ The main benefit will center around allowing them to easily and quickly share and get access to live video footage. This will allow them to: (i) Make better

⁴⁶ January 2016 to December 2016. All values used for projections refer to the last month of such phase – December 2016 – and are derived from financial projections detailed in section **6.2.8. Revenue Streams** of this work and exhibited in **Table 11** of the Appendix.

⁴⁷ The app was designed to have an agnostic nature, by allowing for connections between any number of users, at any point in time, and in any social setting. Moreover, when connected, the app's functionalities allow users to show live footage of whatever they desire. The variations of usage are thus infinite due to the multitude of actions and contexts.

decisions individually or as a group (e.g. commuters checking traffic conditions; friends deciding on the best bar, club or restaurant to visit). This is based on the influence information can have on congregation⁴⁸ (or avoidance of), as well as redirection⁴⁹ of individuals; (ii) Share moments with remote friends while they are experiencing them, through a communication channel that delivers higher media richness⁵⁰ and social presence⁵¹; (iii) Be entertained by “travelling” digitally (e.g. Connecting to other members of the network that are in remote locations of the planet); and (iv) view live events that interest them, as well as their location on the world map.

For advertisers and advertising agencies, the value created should be much more straightforward: helping them reach a segmented audience, at high ROI, and doing so through marketing messages with rich media formats.⁵²

Regarding event managers, There App should deliver them a broader audience for their events and the possibility to increase attendance rates.⁵³ It should also provide their regular audience with a different perspective of the event they are attending (e.g. allowing attendees to see a concert from multiple different angles thanks to strategically-distributed cameras).

As discussed in the second sub-research question, the value the platform will create for all these constituents is further accelerated in the form of direct network effects. There App will become increasingly attractive to users according to the number of other active members, as these will increase the possibilities of connection and consequently places they are able to see. Likewise, the platform will create value by making it easier for its

⁴⁸ Literature on the subject suggests that mobile technology can accelerate the exchange of information, altering the urban metabolism, possibly even leading to a ‘real-time’ city (Townsend 2000).

⁴⁹ Redirection refers to individuals’ ability to act on information obtained through their mobile phones to alter trips already in progress, as has been shown in other contexts by Ling and Yttri (2002).

⁵⁰ Authors suggest communication exists to reduce ambiguity and uncertainty and that these are influenced by media richness - the amount of information that can be transmitted in a certain time interval (Daft and Lengel 1986).

⁵¹ Social presence is defined as the sensorial (acoustic, visual, and physical) information that occurs between communicators and which is influenced by the intimacy and immediacy of the communication medium (Short, Williams and Christie, 1976).

⁵² As debated in section 4.1.2. *Advertisers and Advertising Agencies* of this research work.

⁵³ As verified in the case of student unions, debated in section 4.1.3. *Event Managers* of this research work.

constituents to find each other and share valuable information in the form of visual content.

6.2.2 Key Activities

In order to deliver on its value propositions, There App will need to conduct several core activities. Company-wide activities include designing and developing the software on which its whole platform is based on, performing maintenance on any hardware that supports its company's activities (e.g. backup servers, video cameras). Catering to its end users will entail conducting marketing efforts to increase its user base or retain existing members (e.g. advertising and P.R. campaigns)⁵⁴ and controlling and optimizing user engagement levels with the app.

Regarding both advertisers and event managers, core activities to focus on should be: (i) acquiring and managing relationships with key players; (ii) negotiating terms with clients; and (iii) controlling advertisement/event quality for maximum relevance and user engagement levels.

6.2.3 Key Resources

The key resources that the company needs to focus on to execute its value proposition are its mobile app, all the supporting hardware (e.g. video cameras, backup servers), human resources such as software engineers that are pivotal for the constant approximation of the platform to its customers needs, its intellectual property (e.g. trademarks, utility patents), and its user data (e.g. profile information, privacy settings). Data on its users, in particular, will be key for the long-term success of the company since it will allow There App to extract valuable information on metrics such as usage patterns, user preferences, which it can then use for its own iteration as a platform, or to better service its other customer groups.

⁵⁴ As mentioned before, this is most likely the most crucial activity for the company (apart from software development) due to the pivotal influence users have on There App's success.

6.2.4 Key Partners

In order to improve its operational effectiveness and reduce risks, There App will need to establish partnerships with key stakeholders such as mobile software distribution platforms, cloud computing service providers, third-party software providers, government and public entities, colleges and universities, exchange student associations, content distribution networks (CDNs). Even though advertising agencies and event managers are first and foremost There App's customers, they must also be seen as partners in certain situations, namely in user or advertiser acquisition efforts.

Mobile software distribution platforms can and should be seen as partners, since they will greatly reduce search costs for There App in its efforts to reach end users. Likewise, cloud computing service providers will provide There App with server capabilities at a fraction of the cost, much due to their huge economies of scale. CDNs will allow There App to serve any user with reliable quality in the world, thus should play a crucial role in its value proposition. Finally, as already mentioned, colleges and universities must be at the center of There App's go-to-market strategy.

6.2.5 Customer Segments

As identified when addressing the first sub-research question, the company's three relevant customer groups should be end users, advertisers and event managers. Further segmentation can be performed of end users into college students, as these have been identified as potential early-adopters who have specific traits and needs. Consequently, event managers can also be separated into student unions, which will require specific customer relationships.

An estimation of the potential growth of each customer group was made, taking into account assumptions resulting from data resulting from the company's own market experience, as well as the surveys and interviews findings. Underlying assumptions and end user and event managers' growth projections are presented in **Tables 1, 2, 6** and **7** and **Figures 16** and **17** of the Appendix. The power of the viral effect is evident in the

figures presented.⁵⁵ There App should aim to constantly improve its app to match users' needs and invest in marketing actions, so that it can keep word-of-mouth at levels that sustain its virality. Its success as a platform greatly depends on this factor. In order to achieve such, customer relationships need to be optimized and channels need to be stimulated.

6.2.6 Customer Relationships

There App will need to establish different types of relationships with their multiple customer segments. Given its massive user base nature of the platform, it will not be able to establish personalized, attentive customer relationships with each of its users. Hence, the company will need to incorporate automated mechanisms (e.g. FAQ pages, automatic software bug reports) to minimize customer concerns and minimize the need for individual customer support (e.g. email). It should also leverage users' profile information to identify individual customers preferences and tailor the experience from the get-go, or send automated personalized messages.

Regarding both advertising agencies and event managers, dedicated business development teams should be set in place, who can provide personalized support and build prosperous client relationships. Contracts are an additional method that will help align and enforce There App's interests with those of advertisers and event managers.

6.2.7 Channels

There App should explore several key channels to reach its targeted customers, deliver its value proposition and grow its business. Its own mobile app will be the pivotal, on-going channel to provide its service to all distinct customer groups. Its own website, social media pages and blog will also be an important component in acquiring all three customer groups.

⁵⁵ The number of users is directly dependent of the viral coefficient and viral cycle time. The first one represents the number of new customers that originate from referrals of existing customers. The second is the amount of time required for the following cycle beginning with a customer discovering an app, trying it, liking it, inviting friends, friend receiving the invitation and finally trying the app themselves.

Regarding its users, the three crucial acquisition channels will be mobile software distribution platforms (e.g. App Store, Play Store), its own website, blog and social media pages, as well as word-of-mouth.⁵⁶ Additionally, student unions' own marketing channels will provide additional free points-of-contact with potential users.

Advertisers and advertising agencies should be served either by leveraging existing mobile advertising platforms (e.g. iAd) ability to directly embed advertisement into There App's platform or by having a dedicated team selling advertisement slots to advertising agencies.

Regarding event managers, the channels employed must consist of a dedicated business development team who can focus on acquiring and retaining those event managers who fit There App's criteria. During the platform expansion phase, these teams should proceed to contact, visit and demo There App's capabilities to new student unions, as well as manage existing portfolios of customers. Additionally, some word of mouth between students unions is expected to occur so, There App should try to understand how to leverage that fact.

6.2.8 Revenue Streams

As previously concluded, There App's best strategy to sustain its platform will be to subsidize its users and capture value from advertisers in the platform implementation phase. It should do so by selling users attention as a derivative currency. Ads, tailored to users' profile and preferences, should be served in the form of display and video banners.⁵⁷ Revenue is thus assumed to be a function of the number of users on the platform and the average CPM (cost per impression) rates for mobile advertising.⁵⁸ In the platform expansion phase, There App should also begin to explore monetization from broadcasting events. Revenue from this customer group can come in the form of

⁵⁶ From survey findings, around 60 percent of respondents stated that they hear about an app through websites, blogs, social networks, mobile software distribution platforms. Additionally, an impressive 88 percent said they hear it through friends (See Figure 10 in the Appendix).

⁵⁷ In order to maintain a healthy tradeoff between monetization ability and positive user experience, it is suggested (and assumed for the model) that one display and one video banner are shown to each daily active user.

⁵⁸ Cost per mille (CPM) can be understood as the advertising revenue for each 1,000 times an ad is displayed.

event broadcasting fees. Projections of revenue streams along the platform implementation and expansion phases can be seen in **Tables 10 and 11** of the Appendix, respectively. Underlying assumptions are depicted in **Table 3** of the Appendix.

6.2.9 Cost Structure

The company's cost structure is expected to be comprised mostly of server costs, firm overhead such as office, legal and other costs, human resources, and marketing. All projected costs, as well as their distribution over the lifetime of the company are depicted in **Table 8** and **Figure 18** of the Appendix. Underlying assumptions are portrayed in **Table 4** and **Table 5** of the Appendix. Labor costs involved with the development of the app are currently the highest of all (84 percent). It is suggested, however, that as soon as the firm begins its platform implementation phase, it starts channeling the majority of the revenues it is able to generate from advertising towards its own marketing efforts,⁵⁹. This will shift the balance of the cost structure away from human resources, and into marketing. Eventually, these costs will come to dominate the overall cost structure of the company, along side server costs.

7 Strategic objectives and recommendations

Gradual integration of all three constituents – Users, advertisers and event managers – according to all the considerations discussed in this research work, should be guided by certain key strategic objectives and their corresponding key performance indicators (KPIs). These are summarized in Table 12 of the appendix. The company is already pursuing objective 1 (user acquisition and retention) by partnering up with student unions. This will give it the critical mass necessary to unlock direct network effects and

⁵⁹ For this, it was assumed that the ideal monthly online marketing budget should be enough so that 1 out of 24 of the viral users are acquired through ads placed on Facebook. This takes into account the estimated viral effect and the “added push” necessary to empower that growth, while keeping the company in a situation where average customer's lifetime value (CLTV) – the cash amount that each customer generates over its lifetime with the company (3.3 months) - is higher than its average customer acquisition cost (CAC) (See **Table 4** in the Appendix).

attract the other two sides, as well as possible institutional investors. Objectives 2 (user growth rate) and 3 (user daily usage) focus on the medium-term and will test There App's ability to achieve virality through word-of-mouth, as well as its overall user engagement. Objectives 1, 2 and 3 will also determine if the company is able to deliver its main value proposition of peering users for exchange of real-time visual information, which represents a crucial factor in building brand equity. The company should begin focusing on objective 4 (advertisement integration) once objective 1 is met. This will allow it to prove the platform is attractive for advertisers and with it, its own financial viability. Objectives 5 (event managers' acquisition and retention) and 6 (event managers' engagement) should be seen as long-term goals, one that requires assembling a dedicated business development team to acquire those event managers and manage their events.

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